

Printer Specifications

Printing

Printing method:	On-demand ink jet
Nozzle configuration:	64 monochrome (black) nozzles (16 × 4 staggered) 60 color nozzles (20 × 3, cyan, magenta, yellow)

Printable columns and printing speed (color, letter-size paper)*:

Character pitch (characters per inch)	Printable columns	Printing speed (characters per second)	
		Monochrome	Color
10	80	125	170
12	96	150	204
15	120	188	255
17 (10 condensed)	136	214	290
20 (12 condensed)	160	250	340

* Print speeds vary depending on system configuration, software application, resolution, and amount of page covered.

Resolution: Maximum 360 dpi on a 720 × 720 dpi matrix. Dots are printed in an alternating pattern in which horizontal and vertical dots are non-contiguous. Contiguous printing of dots is available only on the diagonal, which yields an effective resolution greater than 360 dpi.

Paper feed speed: 102 milliseconds per 1/6-inch line

Input buffer: 0.5KB to 15KB depending on monochrome/color head unit selection

Print direction: Bidirectional with logic seeking for text and graphics; unidirectional and autodirectional modes available in Default setting mode

Control code: ESC/P 2 and expanded raster graphics code

Paper feeding: Auto sheet feeder

Line spacing: 1/6-inch, 1/8-inch, programmable in 1/360-inch increments

Character tables: 1 Italic and 8 graphics character tables

Character sets: 14 International and 1 legal character sets

Paper

Note:

Since the quality of any particular brand or type of paper may be changed by the manufacturer at any time, EPSON cannot guarantee the use of any particular brand or type of paper. Always test samples of paper stock before purchasing large quantities or printing large jobs.

Paper path: Sheet feeder, top entry

Paper support/sheet feeder: 100 sheets of plain paper at 17 lb (64 g/m²)
10 envelopes
50 transparency films*
70 sheets of EPSON special coated paper
30 sheets of EPSON high-quality glossy paper*

* With one sheet of plain paper beneath the stack and printed one page at a time

EPSON Stylus COLOR IIs

Paper size:	Letter (8.5 × 11 inches) A4 (210 × 297 mm) Legal (8.5 × 14 inches) Statement (8.5 × 5.5 inches) Executive (7.5 × 10 inches)
Paper types:	Plain paper and special papers distributed by EPSON (high-quality glossy paper, special coated paper, and transparencies)
Paper thickness:	0.003 to 0.004 inch (0.08 to 0.11 mm)
Paper weight:	17 to 24 lb (64 to 90 g/m ²) Use 24 lb (90 g/m ²) paper under normal temperature and humidity conditions.

Envelopes:

Size	No. 10	9.5 × 4.1 inches (240 × 104 mm)
	DL	8.7 × 4.3 inches (220 × 110 mm)
Paper types	Plain, bond, or air mail paper	
Paper thickness	0.006 to 0.02 inch (0.16 mm to 0.52 mm)	
Paper weight	12 to 24 lb (45 to 90 g/m ²)	

Transparencies:

Size	A4	(210 × 297 mm)
	Letter	(8.5 × 11 inches)
Thickness	0.003 to 0.0033 inch (0.075 to 0.085 mm)	

Note:

- ❑ Poor quality paper may reduce print quality and cause paper jams and other problems. If you encounter problems, switch to a higher grade of paper.
- ❑ Print on special coated paper, high-quality glossy paper, envelopes, and transparencies only under these normal conditions:

Temperature	59 to 77°F (15 to 25°C)
Humidity	40 to 60% RH

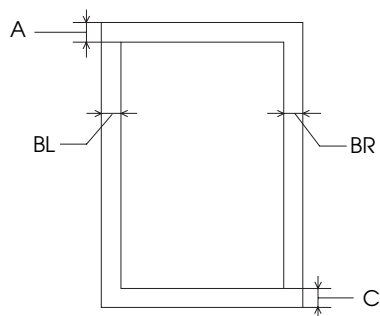
(High-quality glossy paper can be stored at 20 to 60% relative humidity.)

- ❑ Do not load curled or folded paper, envelopes, or transparencies.
- ❑ The following EPSON genuine papers are available:

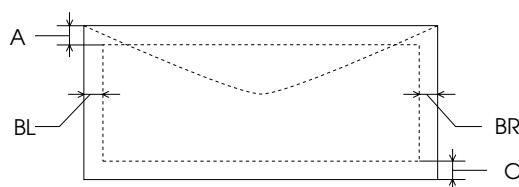
Special coated paper for 360 dpi printing (Letter)	S041060
Special coated paper for 720 dpi printing (Letter)	S041062
Special coated paper for 720 dpi printing (Legal)	S041067
High-quality glossy paper (Letter)	S041072
Transparency film (Letter)	S041064

Printable area:

Single sheets



Envelopes



- A The minimum top margin is 0.12 inch (3.0 mm).
- BL The minimum left margin is 0.12 inch (3.0 mm).
- BR The minimum right margin is:
 - 0.12 inch (3.0 mm) for Statement and Executive paper, and Transparencies
 - 0.38 inch (9.7 mm) for Letter and Legal paper, and transparencies
 - 0.15 inch (3.8 mm) for A4 paper
 - 0.54 inch (13.8 mm) for DL envelopes
 - 1.38 inches (35.1 mm) for #10 envelopes
- C The minimum bottom margin is 0.54 inches (14.0 mm).

Note:

Always load paper into the sheet feeder short edge first except envelopes. Load envelopes long edge first.

Ink Cartridges

Black ink cartridge (S020047):

Color	Black
Print capacity*	540 pages (A4 paper; text)
Cartridge life	2 years from production date and up to 6 months after opening the package at 77°F (25°C).
Temperature	Storage: -4 to 104°F (-20 to 40°C) 1 month at 104°F (40°C) Transit: -22 to 140°F (-30 to 60°C) 1 month at 104°F (40°C) 120 hours at 140°F (60°C) Freezing:** 24.8°F (-4°C)
Dimensions	1.8 inches (W) × 2.3 inches (D) × 1.5 inches (H)

Color ink cartridge (S020049):

Colors	Cyan, magenta, and yellow
Print capacity*	320 pages (A4 paper; 360 dpi; 5% each color)
Cartridge life	2 years from production date and up to 6 months after opening the package at 77°F (25°C).
Temperature	Storage: -4 to 104° F (-20 to 40°C) 1 month at 104°F (40°C) Transit: -22 to 140°F (-30 to 60°C) 1 month at 104°F (40°C) 120 hours at 140°F (60°C) Freezing:** 24.8°F (-4°C)
Dimensions	1.7 inches (W) × 2.2 inches (D) × 1.5 inches (H)

* The print capacity may vary depending on how often you use the print head cleaning function. Also, if you print large graphics and dense text with little white space, you use ink faster.

** The ink thaws and is usable after approximately 3 hours at 77°F (25°C).

C **Caution:**

- ☐ Use only genuine EPSON cartridges and do not refill or dismantle them. Other products may cause damage to your printer not covered by EPSON's warranties.
- ☐ Do not use an ink cartridge after the expiration date on the package.

Mechanical

Paper feed method: Friction with auto/manual sheet feeder, top entry

Total print volume: 25,000 pages

Dimensions: Without paper support and output tray
 Width 15.6 inches (396.7 mm)
 Depth 8.1 inches (205.6 mm)
 Height 5.7 inches (144.0 mm)

With paper support and output tray
 Width 15.6 inches (396.7 mm)
 Depth 20.8 inches (528.5 mm)
 Height 10.5 inches (267.3 mm)

Weight: 8.6 lb (3.9 kg) without the ink cartridge and print head unit

Electrical

Input voltage range: 103.5 to 132 V

Rated frequency range: 50 to 60 Hz

Input frequency range: 49.5 to 60.5 Hz

Rated current: 0.5A

Power consumption: Approx. 13 W (during self test printing at 10 cpi)

Environmental

Temperature: Operation 50 to 95°F (10 to 35°C)
 Storage* -4 to 140°F (-20 to 60°C)
 1 month at 104°F (40°C)
 120 hours at 140°F (60°C)

Humidity: Operation 20 to 80% RH
 Storage* 5 to 85% RH
 (without condensation)

* Stored in shipping container

Safety Approvals

Safety standards: UL 1950 with D3, CSA 22.2 950 with D3

R.F.I.: FCC part 15 subpart B class B
 CSA C108.8

Fonts

The printer comes with an installed set of fonts as described and shown in the tables below. However, the printer always uses the fonts you select with your software program. The only time you need to select the printer's installed fonts is when your software program does not allow you to select fonts.

You can select other font and pitch combinations using ESC/P 2 commands.

Scalable fonts

Fonts	Minimum point size	Maximum point size	Increments
EPSON Roman	8	32	2
EPSON Sans Serif	8	32	2
EPSON Roman T	8	32	2
EPSON Sans Serif H	8	32	2

Bitmap fonts

Fonts	10 cpi	12 cpi	15 cpi	Proportional
EPSON Roman	√	√	√	√
EPSON Sans Serif	√	√	√	√
EPSON Courier	√	√	√	N/A

Interface Specifications

Your printer is equipped with an 8-bit parallel interface.

Data format: 8-bit parallel, IEEE P1284 compatible mode

Synchronization: STROBE pulse

Handshake timing: BUSY and ACKNLG signals

Signal level: TTL compatible

Connector: 36-pin Centronics connector or equivalent

Pin Assignments

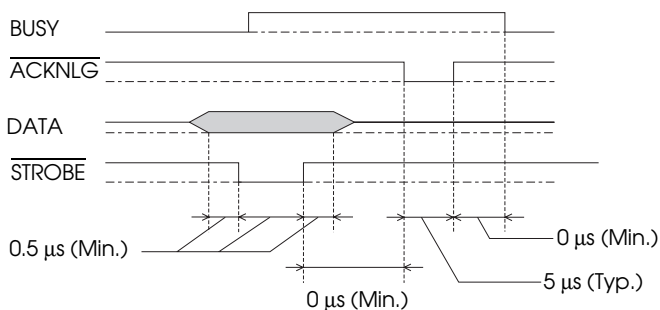
Signal pin	Return pin	Signal	Direction	Description
1	19	STROBE	IN	STROBE pulse to read data.
2	20	DATA 1	IN	These signals represent information in bits 0 to 7 of parallel data respectively. Each signal is at HIGH level when data is logical 1 and LOW when it is logical 0.
3	21	DATA 2	IN	
4	22	DATA 3	IN	
5	23	DATA 4	IN	
6	24	DATA 5	IN	
7	25	DATA 6	IN	
8	26	DATA 7	IN	
9	27	DATA 8	IN	
10	28	ACKNLG	OUT	About a 5- μ s pulse. LOW indicates data has been received and the printer is ready to accept more data.
11	29	BUSY	OUT	A HIGH signal indicates the printer cannot receive data. The signal goes HIGH in the following cases: 1) During data entry (for each character) 2) During initialization 3) During self test, demonstration, and default setting printing 4) During a printer-error state
12	28	PE	OUT	A HIGH signal indicates the printer is in a paper-out state or in an error state.
13	28	SLCT	OUT	Pulled up to +5 V through 1 k Ω resistance
14	30	AFXT	IN	Not used
15	-	NC	-	Not used
16	-	GND	-	Logic ground level
17	-	CHASSIS GND	-	Printer's chassis ground, which is connected to the logic ground
18	-	Logic H	OUT	Not used
19-30	-	GND	-	Twisted-pair return signal ground level

Signal pin	Return pin	Signal	Direction	Description
31	30	INIT	IN	When this signal goes LOW, the printer controller is reset to its default state when the power is first turned on and the print buffer is cleared. This level is normally HIGH; its pulse width must be more than 50 μ s at the receiving terminal.
32	29	ERROR	OUT	This signal level goes LOW when the printer: 1) Is out of paper 2) Is in an error state 3) Has no ink cartridge installed
33	-	GND	-	Same as for Pins 19-30
34	-	NC	-	Not used
35	-	+5 V	OUT	Pulled up to +5 V through 1 k Ω resistance
36	30	SLIN	IN	Not used

Notes:

- ❑ The column heading "Direction" refers to the direction of signal flow as viewed from the printer.
- ❑ "Return pin" denotes the twisted-pair return pin to be connected at signal ground level. For the interface wiring, be sure to use a twisted-pair cable for each signal and to complete the connection on the return side.
- ❑ All interface conditions are based on TTL level. Both the rise and fall times of each signal must be less than 0.2 microseconds.
- ❑ Data transfer must be carried out by observing the ACKNLG or BUSY signal. Data transfer to this printer can be carried out only after receipt of the ACKNLG signal or when the level of the BUSY signal is LOW.

Timing Chart



Transition time (both the rise and the fall) of every signal must be less than 0.2 μ s.

Initialization

The printer can be initialized (returned to a fixed set of conditions) in these ways:

Hardware initialization	* The printer is turned on. * The printer receives an INIT signal from the parallel interface: pin 31 goes LOW.
Software initialization	* Software sends the ESC @ (initialize the printer) command. The last panel settings are kept.
Control panel initialization	* Hold down the Alt button and press the Pause button (buffer clear). The last panel settings are kept.

All three initialization methods reset the font according to the default settings selected using the control panel. However, ESC @ does not initialize the printer mechanism, clear the input data buffer, or clear the user-defined character set. The control panel initialization does not initialize the printer mechanism or clear the user-defined character set.

Default Settings

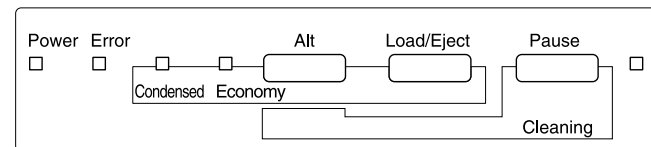
The table below shows the default settings that take effect when the printer is initialized.

Item	Default setting
Top-of-form position	Current paper position
Page length	Single sheets: 61 lines for letter-size paper 65 lines for A4-size paper
Left and right margins	Cancelled
Line spacing	1/6-inch line spacing
Character pitch	Last font selected using default setting
Vertical tab position	Cleared
Horizontal tab positions	Every eight characters
Font selection	Last font selected using default setting
Special printing effects	Cancelled (except condensed and economy printing)
User-defined character set	Hardware/control panel initialization: cleared Software initialization: deselected only
Graphic mode assignment	ESC K = ESC * 0, ESC L = ESC * 1, ESC Y = ESC * 2, ESC Z = ESC * 3

In addition, hardware and control panel initialization erases any text in the data buffer.

Control Panel

The printer's control panel contains lights for displaying the printer status and buttons for controlling certain settings, as described in this section.



Since most printer settings can be controlled from your software, you do not often need to use the control panel. You need to use it only to do the following:

- ☐ Turn on economy or condensed mode
- ☐ Clean the black or color print heads
- ☐ Replace an ink cartridge or print head
- ☐ Print a demonstration of the printer's fonts and colors
- ☐ Enter the Default setting mode
- ☐ Pause the printer temporarily or reset it
- ☐ Run a self test
- ☐ Enable the non-smear printing feature
- ☐ Print hexadecimal data.

The control panel lights and buttons are described below.

Lights

- Power** On when the printer is on.
- Error** On or flashes in combination with other lights to indicate printing problems or errors.
- Condensed** On when condensed mode is selected. In this mode, the printer prints selected fonts at 60% of their width so that more characters can fit on a page.
- Economy** On when economy printing mode is selected. In economy mode the printer uses less ink by printing fewer dots per character. Use this mode for rough drafts of text only.
- Pause** On when printing is paused. This light flashes when you clean the print heads or replace a print head unit or ink cartridge. Never turn off the printer when the Pause light is flashing.

The Pause light also flashes when an error occurs.

Buttons

This section describes the control panel button functions as well as certain button combinations and power-on sequences.

Alt	When pressed for about five seconds, moves the print head unit to the install position. Press it again to move the print head back to the home position.
Load/Eject	Loads or ejects a sheet of paper. The printer normally loads and ejects paper automatically.
Pause	Stops printing temporarily. Press it again to resume printing. To reset the printer, hold down this button for about five seconds until all the lights turn on. This clears the printer's buffer and restores the factory default settings.

Button combinations and power-on functions

The button combinations below let you perform additional functions to control your printer.

Alt + POWER switch	Prints a demonstration page of the printer's fonts and colors. (Paper must be loaded in the printer.) To exit demonstration mode, press the Pause button and then turn off the printer.
Load/Eject + POWER switch	Checks the paper length and performs a printer self test at 360 dpi. To stop the self test, press the Pause button and then turn off the printer.
Alt + Pause	Starts the print head cleaning cycle.
Pause + POWER switch	Enters the printer's Default setting mode. To exit the Default setting mode, press the Pause button and turn off the printer.
Alt + Load/Eject	Selects a combination of economy printing and condensed printing modes, as shown below. Hold down the buttons together to enter the Economy/Condensed mode. Then hold them down again until the Economy and Condensed lights indicate the appropriate selection.

Status	Economy light	Condensed light
Economy and condensed printing off	Off	Off
Condensed printing on	Off	On
Economy printing on	On	Off
Economy and condensed printing on	On	On

Alt + Load/Eject + POWER switch	Enables the non-smear printing feature, which reduces the chance of smeared pages by decreasing the per-line printing speed. This mode is helpful when printing on coated paper because it allows more time for the ink to dry. To exit the non-smear mode, press the Pause button and turn off the printer.
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Load/Eject + Pause + POWER switch	Prints a page containing a hexadecimal representation (hex dump) of the data received by the printer for troubleshooting purposes. To exit the hex dump mode, press the Pause button and turn off the printer.
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Default Setting Mode

Additional printer functions are available through the Default setting mode. Because the printer's factory default settings are designed to meet the needs of almost all users, you rarely need to change the additional printer functions listed below. If necessary, however, you can turn on the Default setting mode and change the settings using the control panel buttons.

- ☐ **Character table.** Selects the set of characters and symbols that can be printed. The default is the U.S.A. character table. If you commonly use a language containing accents, symbols, or other characters not available in the U.S.A. character table, change to a different character table.
- ☐ **Network interface mode.** If you're having trouble printing when the printer is connected to multiple computers, turn on network interface mode. By default, network interface mode is off.
- ☐ **Print direction.** Specifies how the print head moves across the page. The options are Uni-D, Bi-D, and Auto (default). When Uni-D is on, the print head prints in only one direction to provide the most precise alignment for graphics and text. In Bi-D printing, the print head prints in both directions. Bi-D is faster, but the vertical alignment may not be as precise as Uni-D. When Auto is selected, the printer switches automatically between Uni-D and Bi-D as necessary when it receives data.
- ☐ **Auto line feed.** Specifies that a carriage return character encountered in the print file be accompanied by a line feed command. By default, auto line feed is off. If text lines print on top of one another, turn on auto line feed.
- ☐ **Loading position.** Determines the top margin by defining how close to the paper edge the first line can print. The loading position can be 3 mm or 8.5 mm (default). Normally you should use your software to adjust your top margin.
- ☐ **Font and Pitch.** Selects the built-in printer font and character pitch used as the default setting. The factory default pitch is 10 cpi; the default font is Courier. Generally you use your software to select the font and pitch.
- ☐ **Thick paper.** Select Envelope (default) if you print on thick paper or envelopes.

To turn on the Default setting mode and print instructions, turn off the printer. Then hold down the Pause button while you turn the printer back on. Follow the instructions that describe how to change the default settings by pressing the buttons on the control panel.

Note:

You do not need to use the Default setting mode if you can change any of the functions using your software.

Charging the Ink Delivery System

Your printer comes with a color print head, installed in the printer, and a monochrome print head, packed in the plastic storage box. Each print head holds a color or black ink cartridge. When you want to print in color, you install the color print head unit with the color ink cartridge in the printer, and when you want to print in black, you install the monochrome print head unit and black ink cartridge in the printer.

Note:

When printing a page that does not include color, using the black ink cartridge is faster and more economical. However, the color ink cartridge can print composite black. Composite black is a mixture of the inks in the color ink cartridge and closely resembles black ink.

When you first set up the printer, you need to charge its ink delivery system by installing first the color ink cartridge and then replacing it with the black print head unit and cartridge. Follow the procedures in this section. Even if you don't plan to use the black ink cartridge immediately, you still need to install it to charge the ink delivery system.

Once both ink delivery systems are charged, you can easily switch between color and monochrome printing as needed.

W Warning:

The ink cartridges are self-contained units. Under ordinary use, ink will not leak from a cartridge. If ink gets on your hands, wash them thoroughly with soap and water. If ink gets into your eyes, flush them immediately with water.

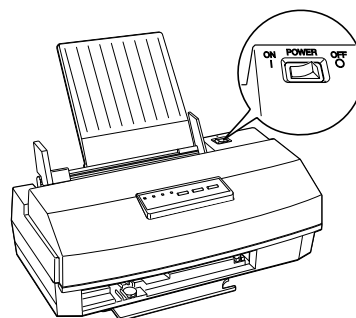
C Caution:

Do not open the ink cartridge packages until just before you install them or they may become too dry.

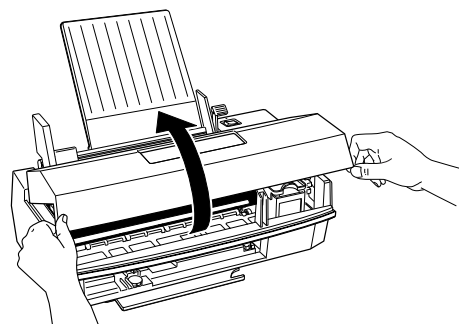
Installing the color ink cartridge

Follow these steps to install the color ink cartridge:

1. Make sure the printer is turned on.



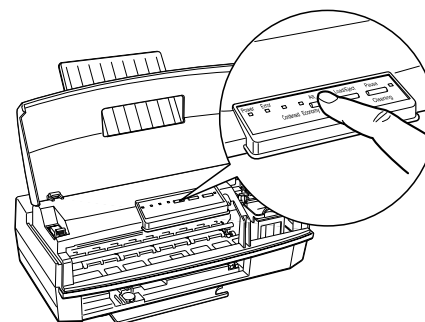
2. Raise the printer cover by lifting the edges, as shown below.



W Warning:

Never insert your hand into the paper path behind the center of the cover; you may damage the printer or injure your hand.

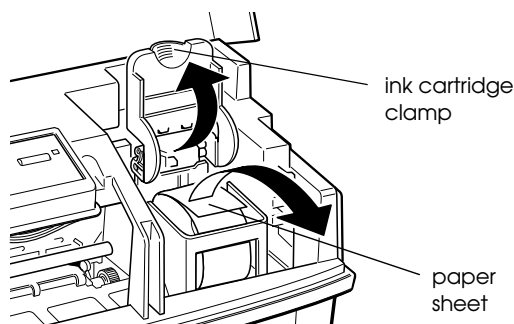
3. Hold down the Alt button for about five seconds until the print head moves slightly left, to the ink cartridge install position. The Pause light begins flashing.



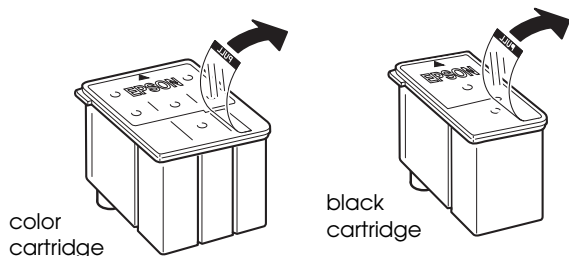
C Caution:

Never move the print head by hand; always use the Alt button to move it.

4. Raise the ink cartridge clamp to open the print head unit.

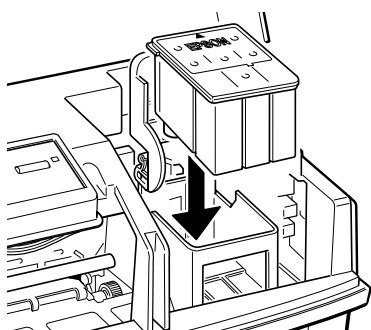


5. Remove the protective paper sheet.
6. Open the foil ink cartridge packages and take out the cartridges. Remove the tape seal from the top of each one. Set the black cartridge aside for now.

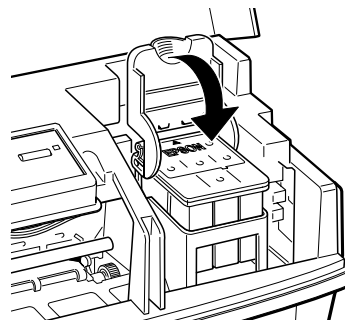


Caution:
You must remove the tape seal from the top of each cartridge; leaving the tape on will permanently damage a cartridge. Do not remove the clear seal from the bottom of the cartridge; ink will leak out.

7. Lower the color ink cartridge into the print head unit with the label facing up and the arrow on the top of the cartridge pointing toward the back of the printer.



8. Press down the ink cartridge clamp until it locks in place. You will feel some resistance.



- Caution:**
- ❑ Once you install an ink cartridge, do not open the ink cartridge clamp again or remove the cartridge except to replace it with a new one. Once you remove a cartridge, do not reuse it. Reusing a cartridge that has been removed may damage the print head.
 - ❑ When you are ready to discard an ink cartridge, always remove it from the print head unit first. Do not discard the print head unit.

9. Press the Alt button again to return the print head to its home position. (Even if you do not press Alt, the print head moves back to its home position about 60 seconds after you close the clamp.)

After you install the color ink cartridge, the printer charges the ink delivery system. This takes about one minute. During this time, the Pause light flashes. When the printer is finished charging, the Pause light stays on without flashing.

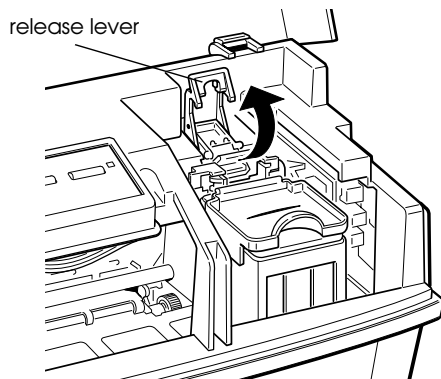
- Caution:**
- ❑ Never turn off the printer while the Pause light is flashing.

Installing the black ink cartridge

Follow these steps to remove the color print head unit and install the monochrome print head unit and black ink cartridge:

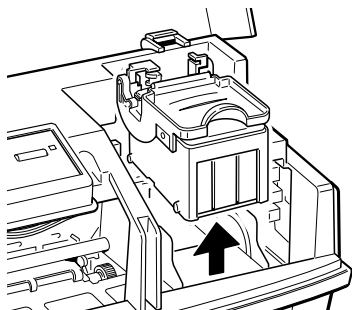
1. Make sure the printer is on and the printer cover is open.
2. Press the Pause button until the Pause light comes on.
3. Hold down the Alt button for about five seconds until the print head unit moves left slightly to the ink cartridge install position. The Pause light flashes.

4. Raise the blue print head unit release lever as far as it will go.



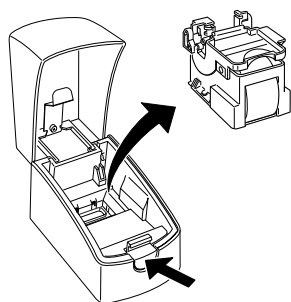
C Caution:
Do not lift up the ink cartridge clamp; the ink cartridge and print head may become unusable.

5. Grasp both sides of the print head unit and carefully lift it out of the printer. Place the print head unit on a flat, clean surface.

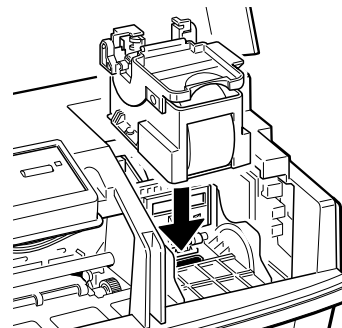


C Caution:
Do not touch the electrical contacts on the back and bottom of the print head unit or inside the printer; you may damage them.

6. Remove the monochrome print head unit from its storage box by pressing on the notch as shown. Place the color print head unit in the box. Always store the unused print head unit in this box to protect its delicate components.



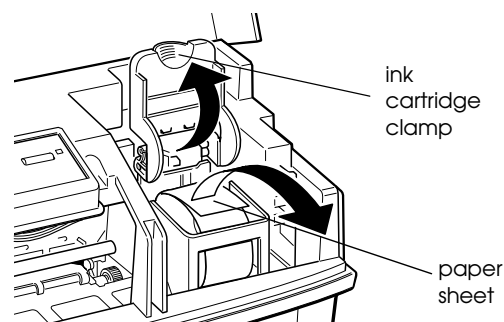
7. Carefully insert the monochrome print head unit into the printer with the electrical contacts and print head facing the back of the printer.



8. When the print head unit is fully seated, press down the blue print head release lever until it clicks into place.

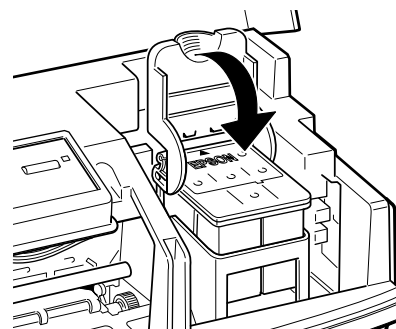
C Caution:
Make sure that the Error and Pause lights are not flashing. If they flash, you must remove the print head unit (beginning at step 4) and reinsert it.

9. Open the ink cartridge clamp and remove the protective paper sheet.



10. Lower the black ink cartridge into the print head unit with the label facing up and the arrow on the top of the cartridge pointing toward the back of the printer.

11. Press down the ink cartridge clamp until it locks in place. You will feel some resistance.



C Caution:

Once you install an ink cartridge, do not open the ink cartridge clamp or remove the cartridge except to replace it with a new one. Once you remove a cartridge, do not reuse it. Reusing a cartridge that has been removed may damage the print head.

12. Press the Alt button again to return the print head to its home position. (Even if you do not press Alt, the printer moves the print head back to its home position about 60 seconds after you close the clamp.)

After you install the black ink cartridge, the printer charges the ink delivery system. This takes about one minute. During this time, the Pause light flashes. When the printer finishes charging, the Pause light stays on without flashing.

C Caution:

Make sure the printer completes the ink charging process even if you plan to reinstall the color print head unit. If the charging process is not completed, the printer may be damaged.

13. Close the printer cover.

C Caution:

- ☐ Never turn off the printer while the Pause light is flashing.
- ☐ When you are ready to discard an ink cartridge, always remove it from the print head unit first. Do not discard the print head unit.
- ☐ When you switch between print head units, always leave the ink cartridge installed. Once you remove a cartridge, do not reuse it. Reusing a cartridge that has been removed may damage the print head.
- ☐ Use only genuine EPSON ink cartridges and do not refill them. Other products may cause damage to your printer that is not covered by EPSON's warranties.

When you want to print in color again, replace the monochrome print head unit with the color print head unit.

In order to maintain optimum print quality, the printer periodically performs a cleaning operation. You may notice the cleaning cycle being performed when the printer has been on for a while without being used or when you turn it on after it has been off for a while.

You may also need to manually activate a cleaning cycle if you notice a decline in print quality.

Testing the Printer

Before continuing, test the printer to make sure it is functioning properly. For the self test, use paper that is at least 8.25 inches (210 mm) wide; otherwise ink sprays directly onto the platen and can smear subsequent pages.

1. Press the POWER switch to turn off the printer.

C Caution:

Never turn off the printer by unplugging it or turning off a power strip. Always turn off the printer by pressing the POWER switch.

2. While holding down the Load/Eject button, press the POWER switch to turn on the printer.

The printer begins printing in 360 dpi (dots per inch) on the first and last lines of the first sheet of paper to measure the page length. Then it prints character samples on the next sheet using the available fonts and, when the color print head is installed, available colors.

3. To end the self test, press the Pause button and then turn off the printer. Otherwise, the test continues until the paper in the sheet feeder runs out.

C Caution:

Do not turn off the printer before pressing the Pause button.

If the quality of the test output is not good, you may need to run a cleaning cycle to clean the print heads. (It may take as many as five cleaning cycles to fully solve the problem.)

Calibrating the Printer

Your printer has been calibrated at the factory so that vertical lines in your text and graphics are properly aligned. If you notice misaligned images in printouts, however, you can calibrate the printer with the Bi-D Calibration Utility. You calibrate the printer twice—once with the monochrome print head installed and once with the color print head installed. You may need to do this after moving the printer to a new location, for example.

You can copy the Bi-D Calibration Utility from the Windows printer driver diskette to your hard disk, or run it from the diskette when needed. Follow these steps:

1. If you did not install the Bi-D Calibration Utility on your hard disk, insert the driver diskette in your computer's diskette drive.
2. Make sure Windows Program Manager is running.
3. To open the Bi-D Calibration Utility, choose Run from the File menu. The Run dialog box appears.

4. Type the drive and directory name where the utility is located. For example, type A:CALIBRAT (or C:\directory\CALIBRAT if it is on your hard disk). Then press Enter.
5. When you see the Calibration Utility screen, make sure Stylus COLOR IIs is selected as the printer. If it isn't, use ↑ or ↓ to select it.

Also make sure Print Calibration Pattern is selected at the bottom of the screen. (Use the Tab key to move down and ↑ to select it, if necessary.)
6. Press Enter to select Calibrate. The printer starts the calibration process.
7. The next screen prompts you to enter an offset value to align the print head.

Wait for 1 minute while the printer prints a page of multiple patterns of vertical lines, each of which is assigned an offset value. In most patterns, the vertical lines are slightly misaligned. Look for the pattern that is most closely aligned.



8. Enter the offset value of the pattern that is most closely aligned and press Enter. The printer prints another sheet to verify that the alignment is correct.
9. If the vertical lines on the sheet are aligned, press Enter to select Done. If the lines are not aligned, press Tab to move to Re-calibrate; then press Enter to repeat the calibration.

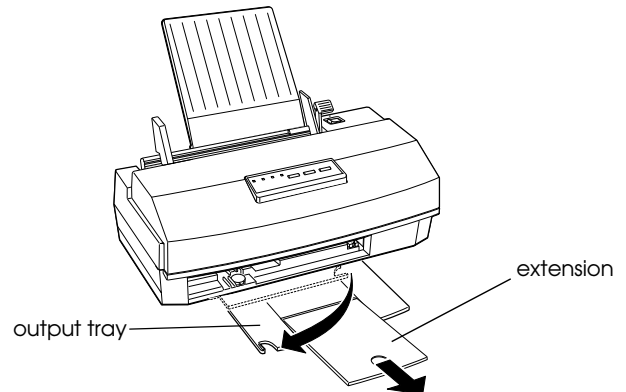
If you notice later that the vertical alignment of your printed pages is off, repeat the calibration procedure.

Loading Plain Paper

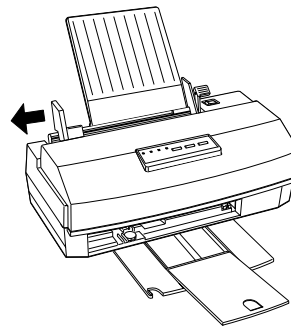
This section explains how to load plain bond paper in the printer. For instructions on loading coated or glossy paper, envelopes, and transparencies, or on feeding paper one sheet at a time, see the later appropriate section.

You can load up to 100 sheets of plain paper in the sheet feeder. Be sure to load it with the printable surface facing up. The printable surface is marked with an arrow on most plain paper packaging.

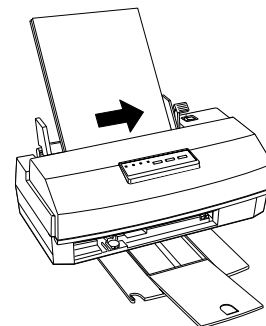
1. Slide out the output tray located at the bottom of the printer; then pull out the extension.



2. Slide the left edge guide on the sheet feeder to the left as far as it will go.

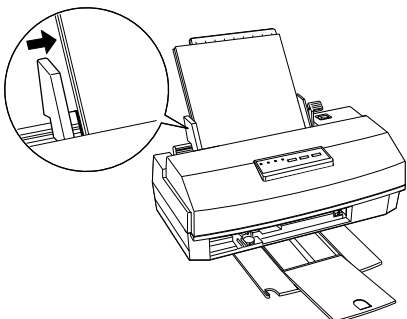


3. Fan a stack of paper; then tap it on a flat surface to even the edges.
4. Load the stack of paper, printable side up, so that its right edge rests against the right side of the sheet feeder.



Do not load paper above the arrow mark inside the left edge guide of the sheet feeder.

- Slide the left edge guide against the left edge of the paper as shown below.



Feeding Paper One Sheet at a Time

You may find instances when you prefer to feed paper into the printer one sheet at a time (when using glossy paper, for example). Follow these steps:

- Make sure that printing is paused. To do this, press the **Pause** button.
- Remove any paper from the sheet feeder and the paper path.
- Move the paper thickness lever to the thick paper position.
- Set the thickness adjustment lever for the type of paper you are loading.
- Feed the paper one sheet at a time into the sheet feeder.

Loading Special Papers and Other Media

When using special coated paper, glossy paper, envelopes, and transparencies, keep the following in mind:

Do not touch the printable surface of the paper; hold the sheets by their edges. The moisture and oils on your hands can reduce print quality.

Use special coated paper and glossy papers within one year of purchase. Use transparencies within six months.

Before printing on EPSON high-quality glossy paper, or special coated paper for 720 or 360 dpi, make sure the color print head unit is installed and Color Head Unit is selected in the driver's Document Type dialog box. If you are loading glossy paper, make sure to set Super - 720 dpi as the printing mode in the driver's Printing Mode/Options dialog box.

When printing on high-quality glossy paper or transparencies, remove each sheet from the output tray immediately after it is printed. Make sure each sheet is dry before stacking.

Return unused sheets and envelopes to their original package as soon as possible after you finish printing. Unfavorable storage conditions—especially high temperature, humidity, and direct sunlight—can damage the media.

Follow any other special loading procedures included in the rest of this section.

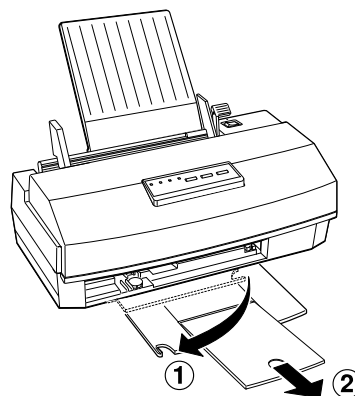
Loading Special Papers and Transparencies

The following procedure explains how to load coated papers, glossy paper, and transparencies. You can load up to the following number of sheets in the sheet feeder:

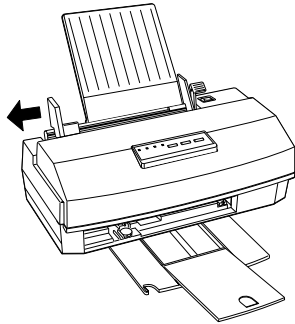
- 70 sheets of special coated paper. If you load legal-size special coated paper for 720 dpi, do not load it more than halfway to the arrow mark on the left edge guide of the sheet feeder.
- 30 sheets of EPSON high-quality glossy paper with a sheet of plain paper beneath the last sheet in the stack. To avoid printing on the plain paper, print your document one page at a time.
- 50 sheets of transparency film, printed one at a time, with one sheet of plain paper beneath the last transparency in the stack.

Follow these steps to load special paper or transparency film:

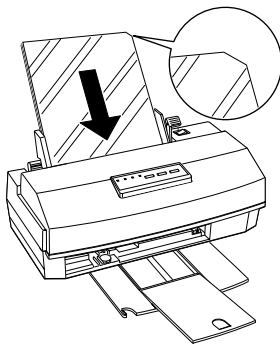
- Slide out the output tray located at the bottom of the printer; then pull out the extension.



- Slide the left edge guide on the sheet feeder to the left as far as it will go.



- Fan a stack of paper or transparencies; then tap it on a flat surface to even the edges.
- Load the paper or transparencies with the printable surface face up. For coated papers, the printable side is whiter than the other side. For glossy paper and transparencies, the printable side is face up when the cut corner is positioned as shown in the illustration below.



- Change the printer driver settings so they are appropriate for the paper or transparency film you loaded.

Once your driver settings are correct, choose Print in the File menu of your application program to print on the media you loaded.

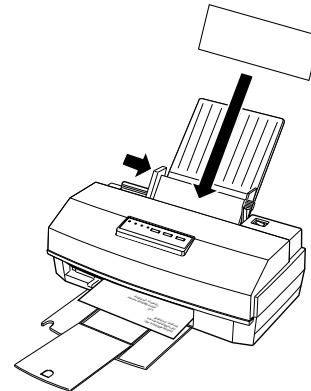
Loading Envelopes

Do not use envelopes that are curled or folded, or ones that are too thin; they may curl during printing. Also, do not choose 720 dpi resolution for envelope printing.

Follow these steps to load envelopes:

- Make sure you set the paper thickness and thickness adjustment levers to the correct positions for envelope printing.

- You can load up to 10 envelopes in the sheet feeder with the printable side facing up (forward) as shown.



- Adjust the left edge guide so the envelopes feed straight into the paper path.
- Change the printer driver settings so they are appropriate for the envelopes you loaded.

Once you select the envelope size and change any other printer settings, choose Print in the File menu to print on the envelopes.

Paper Jam Problems

If paper jams inside the printer frequently, try the following:

- ☐ Use a higher quality paper that is suitable for ink jet printers and is not too thin, too thick, or rough. For best quality, use EPSON special coated and high-quality glossy papers.
- ☐ Fan the stack of paper before you load it.
- ☐ Do not load too many sheets in the sheet feeder. You can load up to 100 sheets of plain paper, 70 sheets of special coated paper, 10 envelopes, 50 sheets of transparency film (with one sheet of plain paper beneath the stack), or 30 sheets of high-quality glossy paper (with one sheet of plain paper beneath the stack).
- ☐ If you loaded plain paper, try turning the stack over. The printable side may have been facing down.

Printer Care

Replacing an Ink Cartridge

You need to replace an ink cartridge when the ink runs out or if print quality declines. The printer's Error light tells you when the ink cartridge is low on ink and when you need to replace the cartridge. If the Error light flashes, the cartridge is low on ink. If the printer stops, the Pause light comes on, and the Error light flashes rapidly, the cartridge is empty.

Before replacing a cartridge, try cleaning the print head as described in the next section.

C Caution:

- ❑ Do not replace an ink cartridge unless the Error light tells you to. If you replace a cartridge before the light flashes, the ink monitoring system will falsely cause the Error light to flash with the new cartridge before it is out of ink.
- ❑ Leave the old cartridge installed in the printer until you are ready to replace it with a new one. Attempting to print without a cartridge installed can damage the printer.
- ❑ When you discard your used ink cartridge, always remove it from the print head unit first. Do not discard the print head unit.
- ❑ Once you install an ink cartridge, do not open the clamp or remove the cartridge except to replace it with a new one. Once you remove a cartridge, you cannot reuse it.

If print quality has declined and five print head cleaning cycles did not improve it, contact your dealer. (You can check print quality by doing a printer self test.)

Selecting the Correct Ink Cartridges

Use only these EPSON ink cartridges:

Black ink cartridge S020047

Color ink cartridge S020049

C Caution:

Use only genuine EPSON cartridges and do not refill them. Other products may cause damage to your printer that is not covered by EPSON's warranties.

Removing and Installing an Ink Cartridge

Follow these steps to replace an ink cartridge:

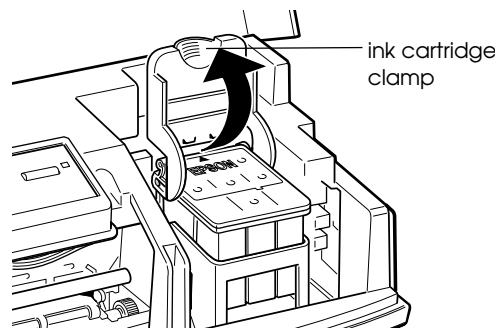
1. Make sure the printer is on and the Error light is flashing.
2. Press the Pause button; the Pause light comes on.
3. Open the printer cover by lifting the edges on both sides.
4. Hold down the Alt button for about five seconds until the print head moves slightly left, to the ink cartridge install position. The Pause light begins flashing.

The carriage returns to the home position after 60 seconds if the ink cartridge is not removed.

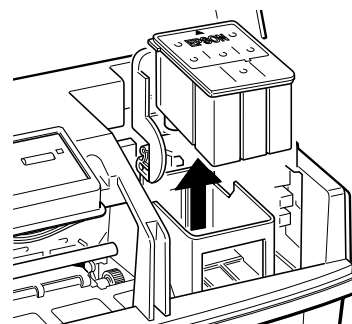
C Caution:

Never move the print head by hand; always use the Alt button to move it.

5. Raise the ink cartridge clamp to open it. The cartridge rises partially out of the printer.



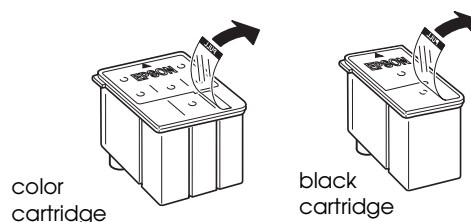
6. Lift the cartridge out of the printer and dispose of it carefully so any excess ink does not spill out. Do not take the used cartridge apart or try to refill it.



W Warning:

If ink gets on your hands, wash them thoroughly with soap and water. If ink gets into your eyes, flush them immediately with water.

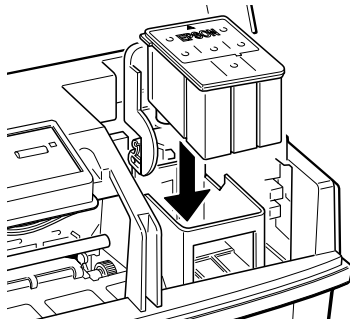
7. Open the package containing the ink cartridge and remove the cartridge from its foil wrapper. Remove the tape seal from the top of the cartridge.



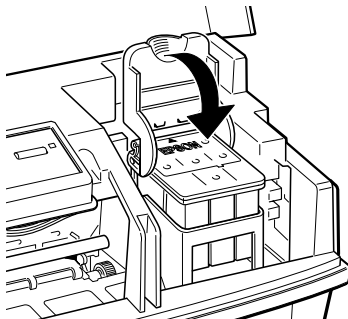
C Caution:

You must remove the tape seal from the top of the cartridge; leaving the tape on will permanently damage it. Do not remove the clear tape seal from the bottom of the cartridge; ink will leak out.

8. Lower the ink cartridge into the print head unit with the label facing up and the arrow on the top of the cartridge pointing toward the back of the printer.



9. Press the ink cartridge clamp down until it locks in place. You will feel some resistance.



C Caution:
Once you install an ink cartridge, do not open the ink cartridge clamp again or remove the cartridge except to replace it with a new one. Once you remove a cartridge, do not reuse it. Reusing a cartridge that has been removed may damage the print head.

10. Press the Alt button again to return the print head to its home position. (Even if you do not press Alt, the printer moves the print head back to its home position about 60 seconds after you close the clamp.)

The Pause light flashes as the printer charges the ink delivery system.

11. Close the printer cover. When the charging cycle finishes, the Pause light stops flashing and stays on. Press the Pause button to turn off the light and resume printing.

C Caution:

- ☐ Never turn off the printer while the Pause light is flashing.
- ☐ When you are ready to discard an ink cartridge, always remove it from the print head unit first. Do not discard the print head unit.
- ☐ Use only genuine EPSON ink cartridges and do not refill them. Other products may cause damage to your printer that is not covered by EPSON's warranties.

In order to maintain optimum print quality, the printer periodically performs a cleaning operation. You may notice the cleaning cycle being performed when the printer has been on for a while without being used or when you turn on the printer after it has been off for a while.

You may also need to manually activate a cleaning cycle if you notice a decline in print quality. See the next section for more information.

Cleaning the Print Head

The printer periodically cleans the print head automatically, so normally you should not need to manually run a cleaning cycle. However, if print quality diminishes, run the print head cleaning cycle to enable the nozzles to deliver ink properly.

The cleaning cycle takes about one minute, during which the carriage moves and you hear the printer recharging the print head. The Pause light flashes throughout the cleaning cycle and then stays on when the cycle is finished.

Follow these steps to clean either print head:

1. Make sure the printer is turned on and press the Pause button.
2. Hold down the Alt button and press Pause. The cleaning cycle begins.
3. When the cleaning cycle is done, press the Pause button to resume printing.

It can sometimes take up to five cleaning cycles to improve print quality. If the print quality does not improve after you clean the print heads five times, contact your dealer.

To clean the other print head, replace the one currently installed. Then repeat the steps above.

Information Reference List

Engineering Change Notices

None

Product Support Bulletins

None

Technical Information Bulletins

None

Related Documentation

TM-STYCLRIIS	EPSON Stylus COLOR IIs Service Manual
PL-STYCLRIIS	EPSON Stylus COLOR IIs Parts Price List
4004979	EPSON Stylus COLOR IIs User's Guide
4004976	EPSON Stylus COLOR IIs Setup Guide